

## Curlyleaf Pondweed (*Potamogeton crispus*)

**Identification:** Curlyleaf pondweed is a submersed aquatic plant. Alternately arranged leaves are stiff, ½-inch wide and 2-3 inches long. Plants begin growth in early spring and flower in late spring to early summer. The inconspicuous, reddish-brown flowers emerge above the surface of the water. Some native *Potamogeton* species may be mistaken for curlyleaf. In Montana only curlyleaf pondweed has crinkled, undulating leaf margins that resemble lasagna noodles with minute ‘teeth’.

Claspingleaf pondweed and other native pondweeds may look a bit wavy, but an additional characteristic for the native pondweeds are leaf veins that run parallel to the midvein, while curlyleaf pondweed veins branch perpendicularly from the midvein (see inset above).



**Impacts:** Profuse growth early in the season creates dense mats that inhibit boating and swimming and can shade and inhibit growth of native plants. The massive amounts of vegetative matter die back in late summer, modifying nutrient levels and increasing algal blooms.

**Habitat:** Plants grow from the shore to depths of 15 feet in ponds, streams, and rivers. Curlyleaf pondweed is able to tolerate a moderate current.

**Spread:** Curlyleaf pondweed does not typically produce viable seed, and reproduction is primarily by stem fragments and vegetative structures called turions that resemble small pine cones. Turions are produced along the stems

just before plants die back in mid-summer. Turions sprout in the autumn and remain alive under the ice and snow, and begin a period of rapid growth in early spring.

**Management Priorities:** Curlyleaf pondweed is listed as a **Priority 1B** noxious weed in Montana. It was first reported in Montana in Lake County in 1973 and has since been found in the following counties: Sanders, Ravalli, Deer Lodge, Granite, Madison, Gallatin, Broadwater, Lewis & Clark, Cascade, and Powell. The majority of reports come from Lewis & Clark and Sanders counties, but the plant is likely much more widespread than reported. Prevention is the most important management strategy.

Thoroughly wash and carefully inspect all recreational equipment before entering a new body of water (especially boat trailers, propellers and bilge water). Once infested, short-term control of dense mats can be obtained with herbicides and/or mechanical harvesting. For example, a large crew of volunteers raked and bagged an infestation at the East Gallatin Recreation Area in Bozeman, MT (photo at right), improving conditions for swimming, boating and fishing. For more information on curlyleaf pondweed, see the Montana Weed Control Association’s Curlyleaf Pondweed Identification sheet at <http://www.mtweed.org/curlyleaf-pondweed/> or the Minnesota Department of Natural Resource’s site at:

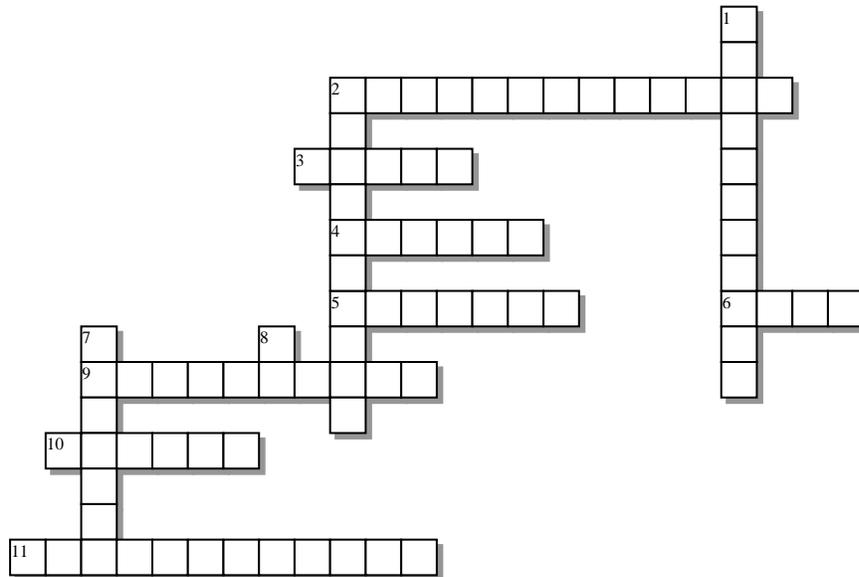


[http://www.dnr.state.mn.us/aquatic\\_plants/submerged\\_plants/curlyleaf\\_pondweed.html](http://www.dnr.state.mn.us/aquatic_plants/submerged_plants/curlyleaf_pondweed.html)

**ATTENTION!** Have you heard about the **Yellow Starthistle Weed Watch Day**, August 4, 2011, in Stillwater County? Read more about it at ‘Upcoming Workshops and Events’ on our website:

<http://www.msuetension.org/invasiveplantsMangold/extensionsub.html>

**Weed Post Puzzle: Test your knowledge of Curlyleaf Pondweed**



**Across:**

- 2 - In contrast to native pondweeds, secondary vein pattern is \_\_\_\_\_ in curlyleaf
- 3 - Minute \_\_\_\_\_ on leaf edges are another diagnostic feature of curlyleaf pondweed
- 4 - Total number of Montana counties reporting curlyleaf pondweed in 2010
- 5 - Name for the reproductive structures that resemble pine cones
- 6 - First Montana county to report curlyleaf pondweed
- 9 - What typically happens after dense mats of curlyleaf pondweed die in late summer (two words)
- 10 - A mechanical control method that may offer one to two years of control (or more?)
- 11 - A native pondweed often mistaken for curlyleaf

**Down:**

- 1 - A common vector for transporting aquatic plants from one water body to another (two words)
- 2 - The most important management strategy for curlyleaf pondweed (before containment and eradication)
- 7 - Curly-leaf pondweed edges resemble this, but it's not to be layered with provolone, ricotta, and meat sauce
- 8 - Montana's state listing for curlyleaf pondweed

Solutions are posted on the MSU Extension Invasive Rangeland Weed website:

<http://www.msueextension.org/invasiveplantsMangold/extensionsub.html>

